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Jange

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(54) **CALCULATION OF FLOW IN AN AIR SYSTEM**

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See application file for complete search history.

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(57)

ABSTRACT

A method is provided for determining an air flow in a vehicle air conditioning system that comprises an inlet; a plurality of outlets; at least one air duct for guiding air from the inlet to the outlets, each air duct being characterized by a predetermined flow resistance coefficient; at least one flap characterized by a flow resistance based on a degree of opening of the flap; and a fan for creating an air flow from the inlet to an outlet. The method comprises determining a total equivalent flow resistance between a predetermined location in the system and an interior of the vehicle, wherein flow resistances are treated as resistances in an electric circuit, and a total equivalent flow resistance is determined. Treating a pressure drop as equivalent with a voltage drop, the air flow can be determined, as the pressure is equal to the resistance times the flow squared.

14 Claims, 4 Drawing Sheets

